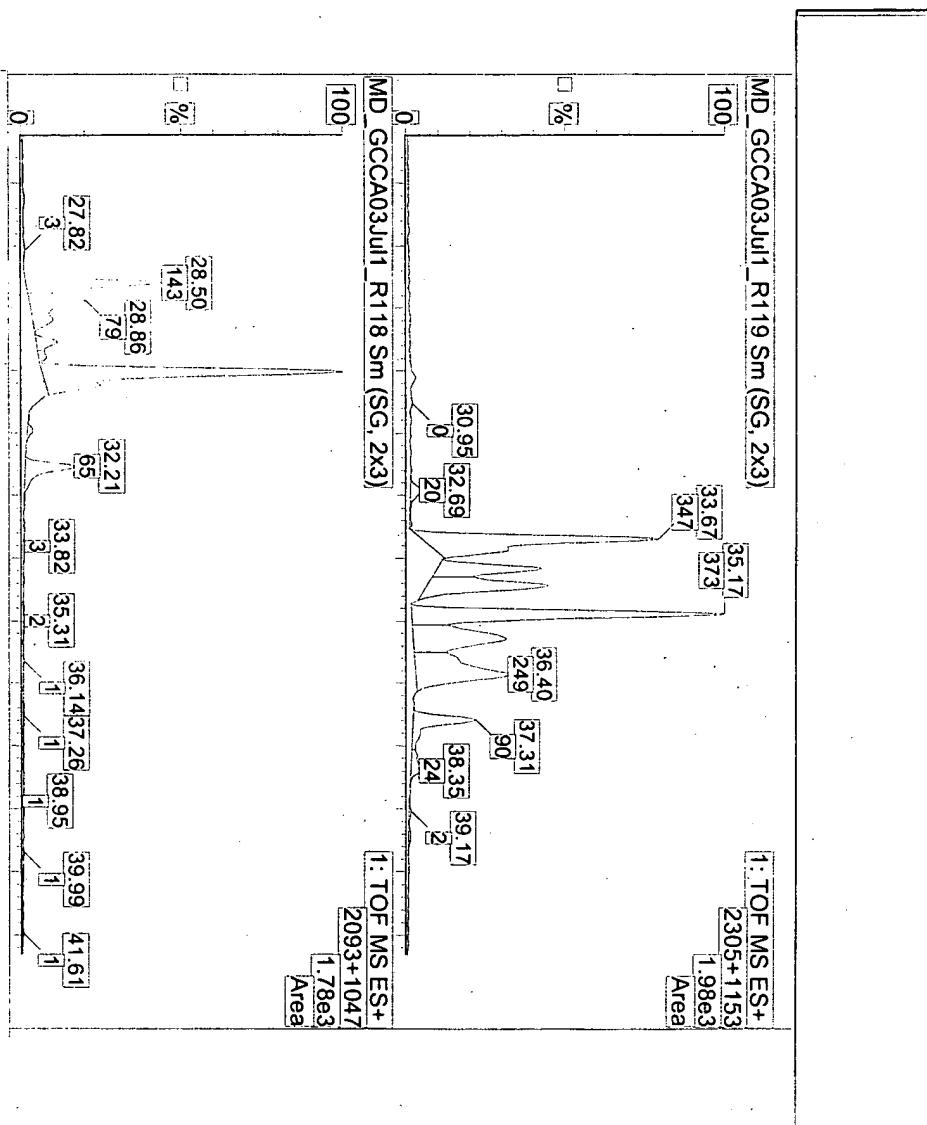
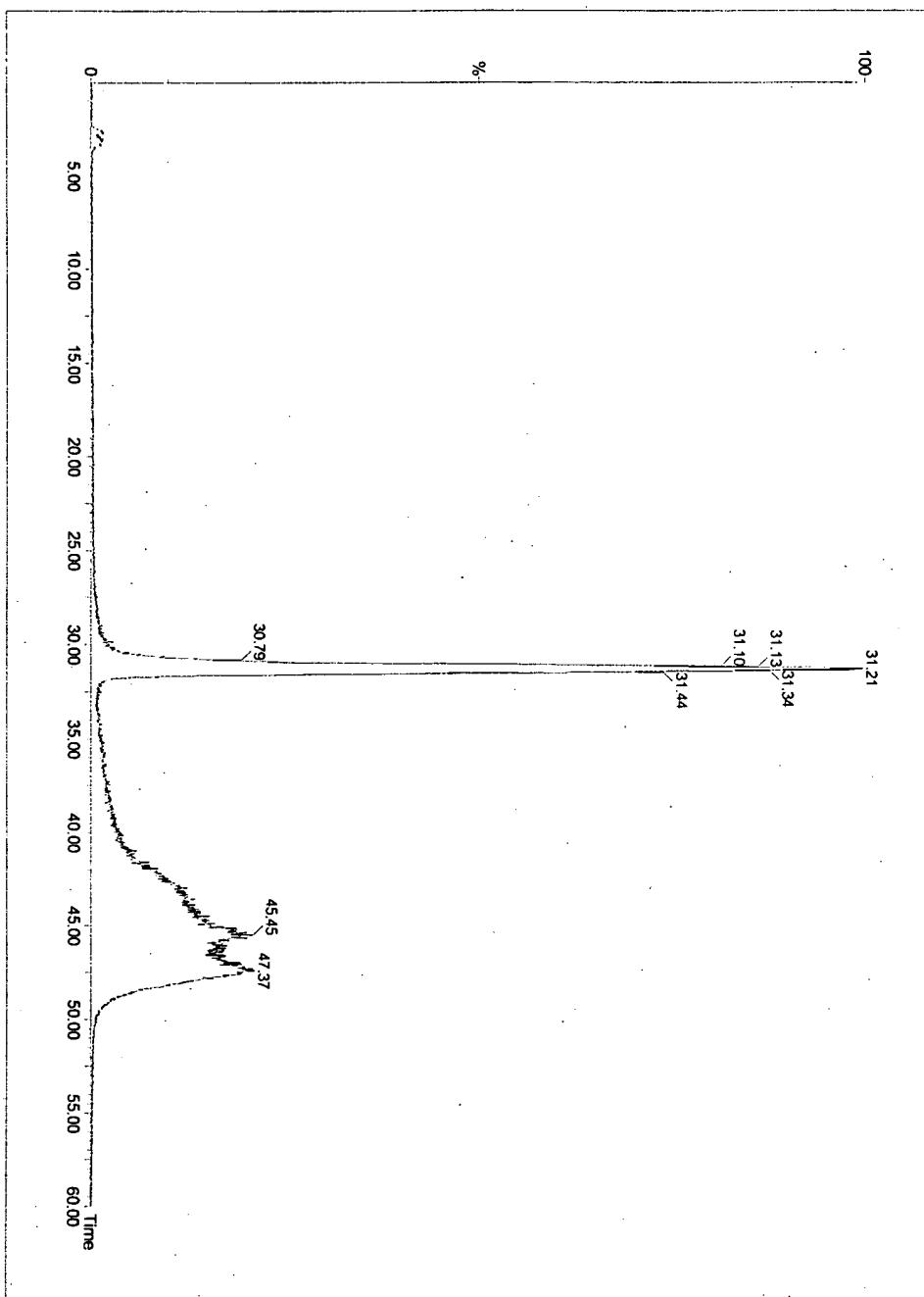


# Figure 1. LCMS analysis of recombinant peptide variants

MM-416776

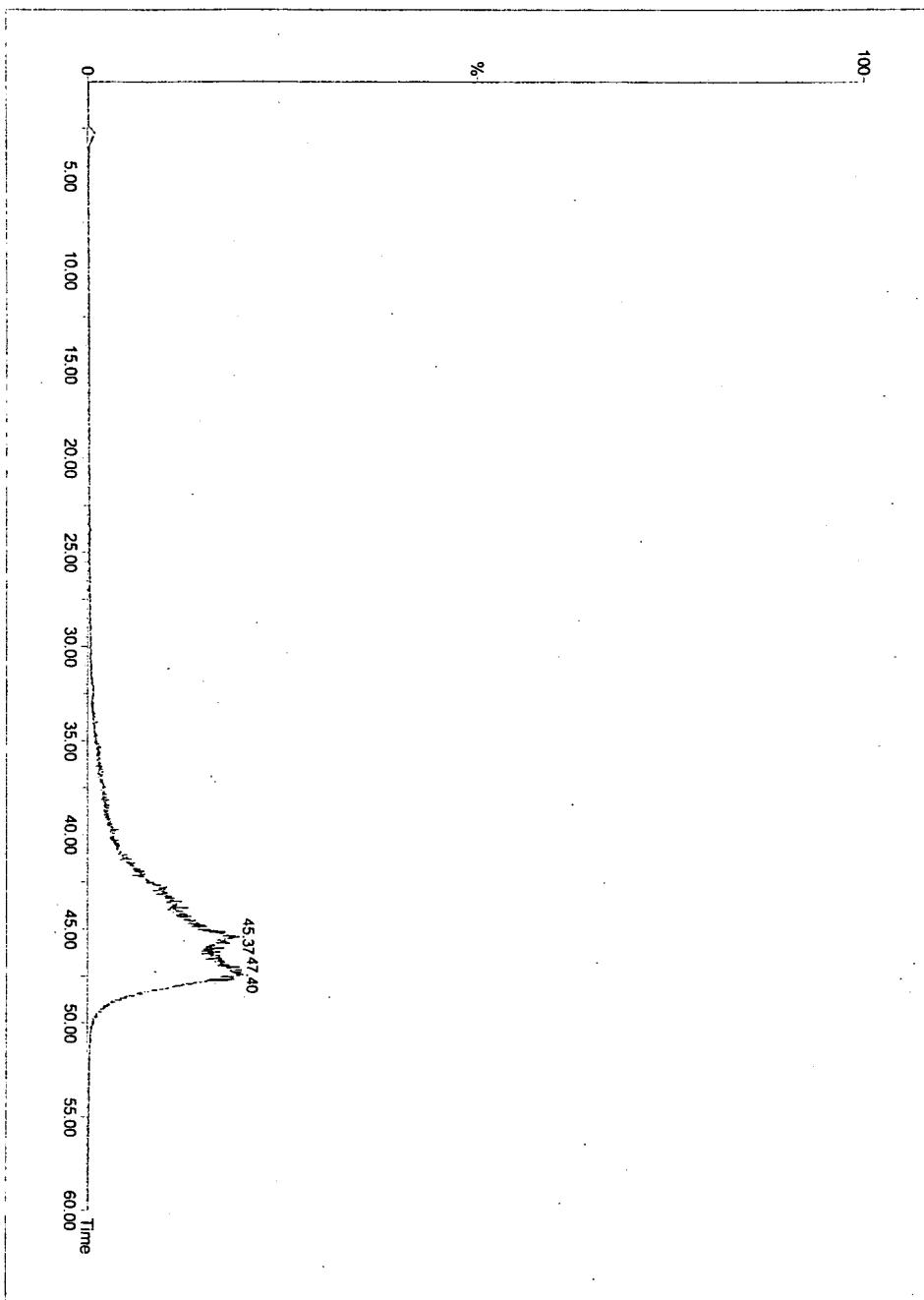


# Figure 1b: LCMS analysis of synthetic MD-1100 (Total Ion Chromatograph (TIC))

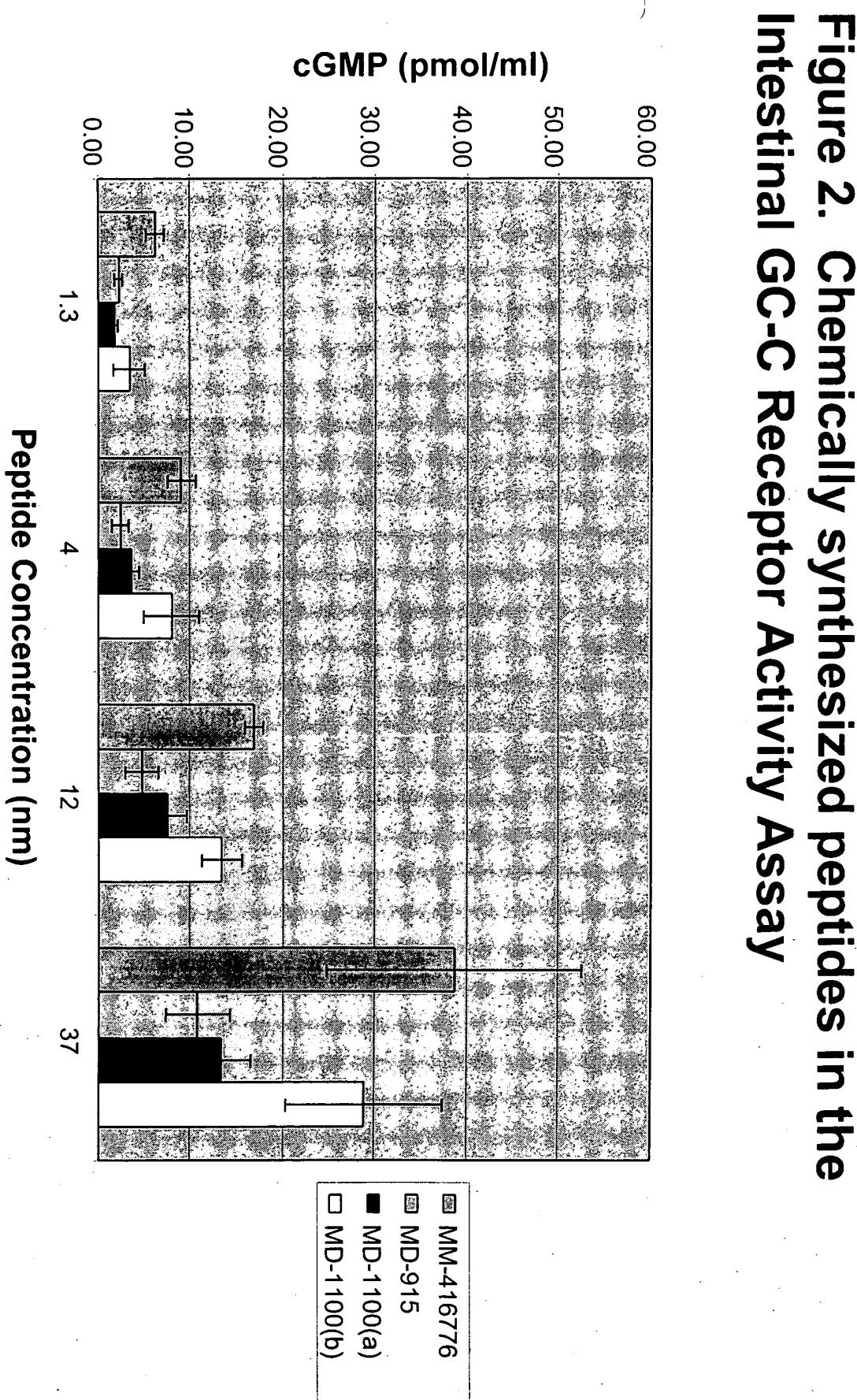


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**Figure 1c: LCMS analysis (Total Ion Chromatograph of blank used in MD-1100 analysis)**



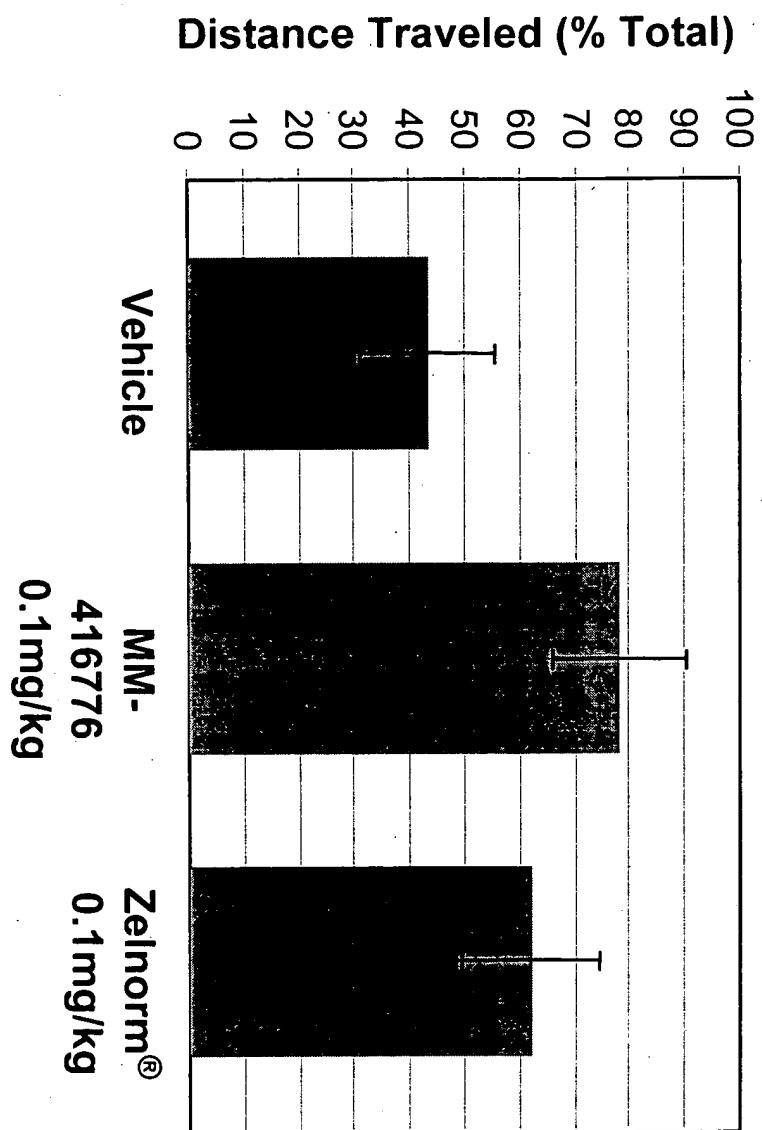
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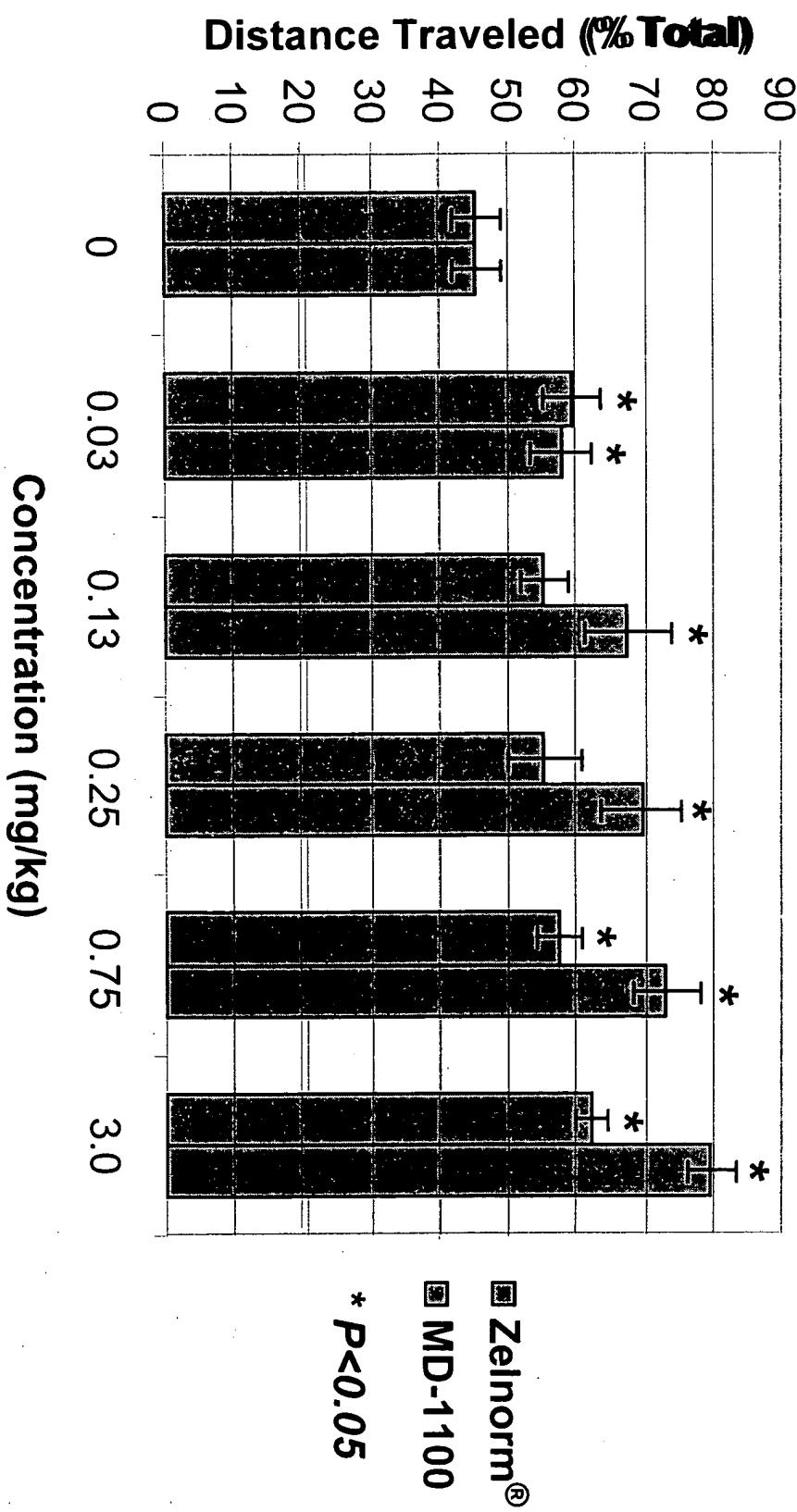
**Figure 3a. MM-416776 vs Zelnorm® in an acute Mouse  
Gastrointestinal Transit Model (GIT)**



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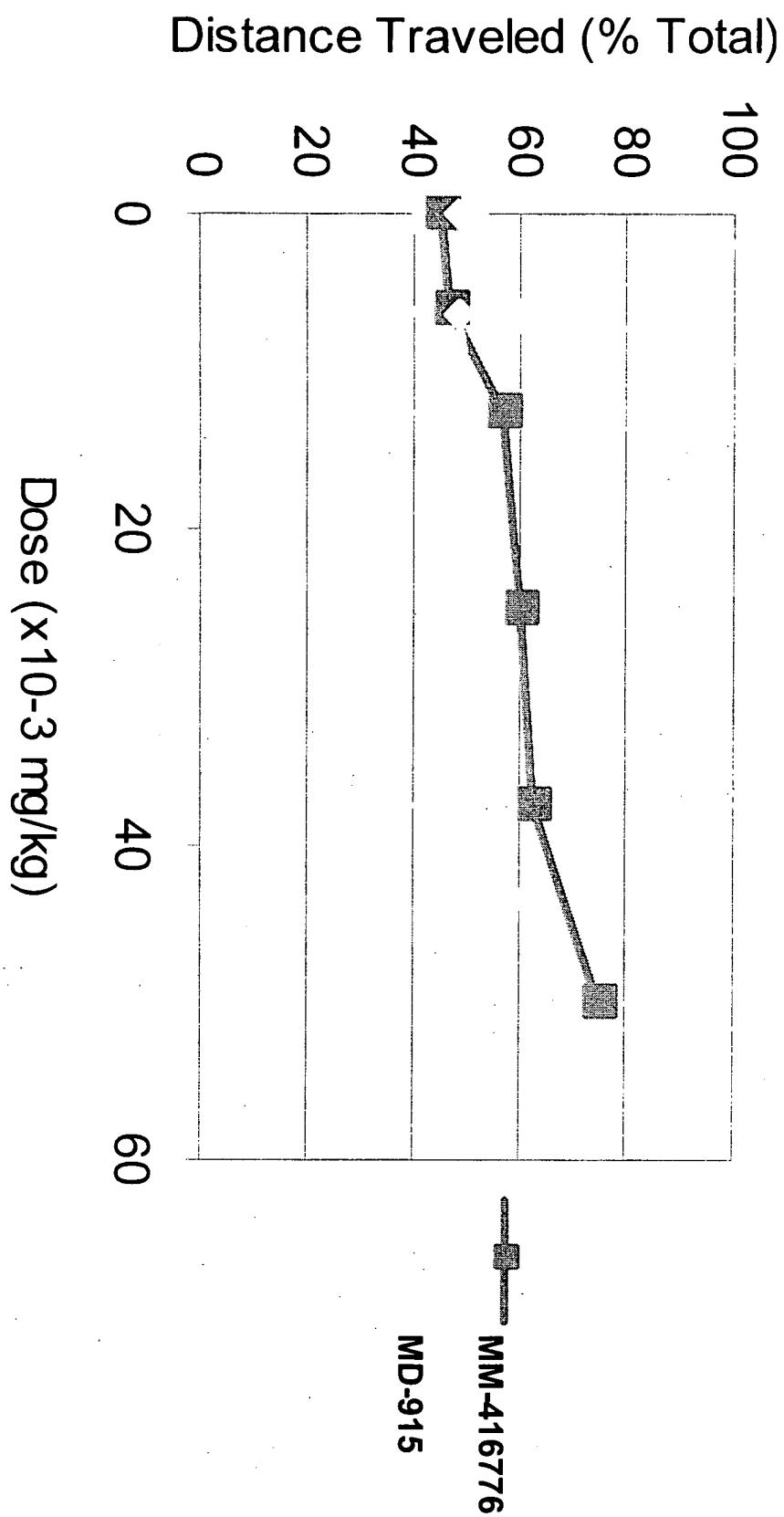
# Figure 3b: MD-1100 vs. Zelnorm® in an acute Mouse Gastrointestinal Transit Model



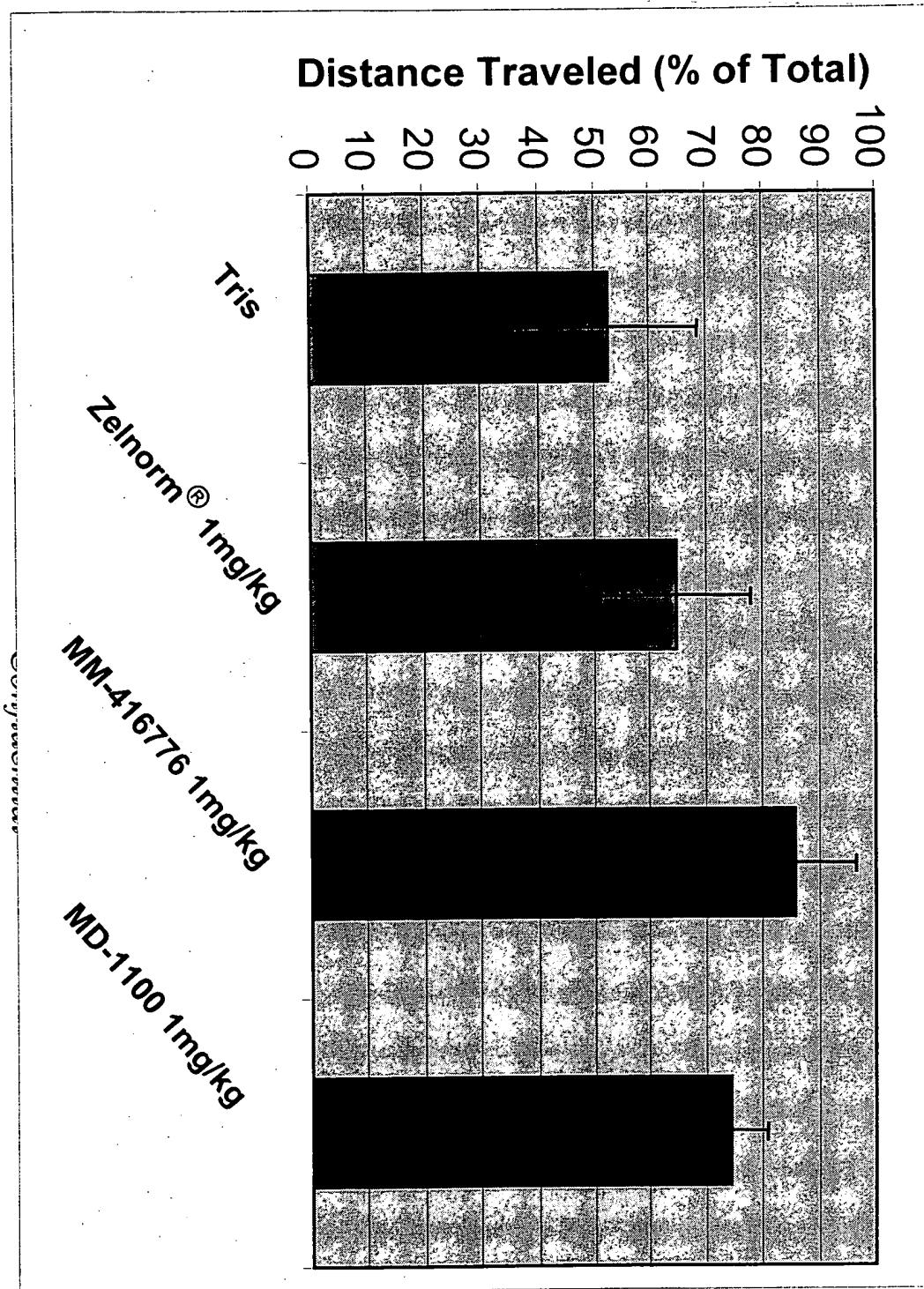
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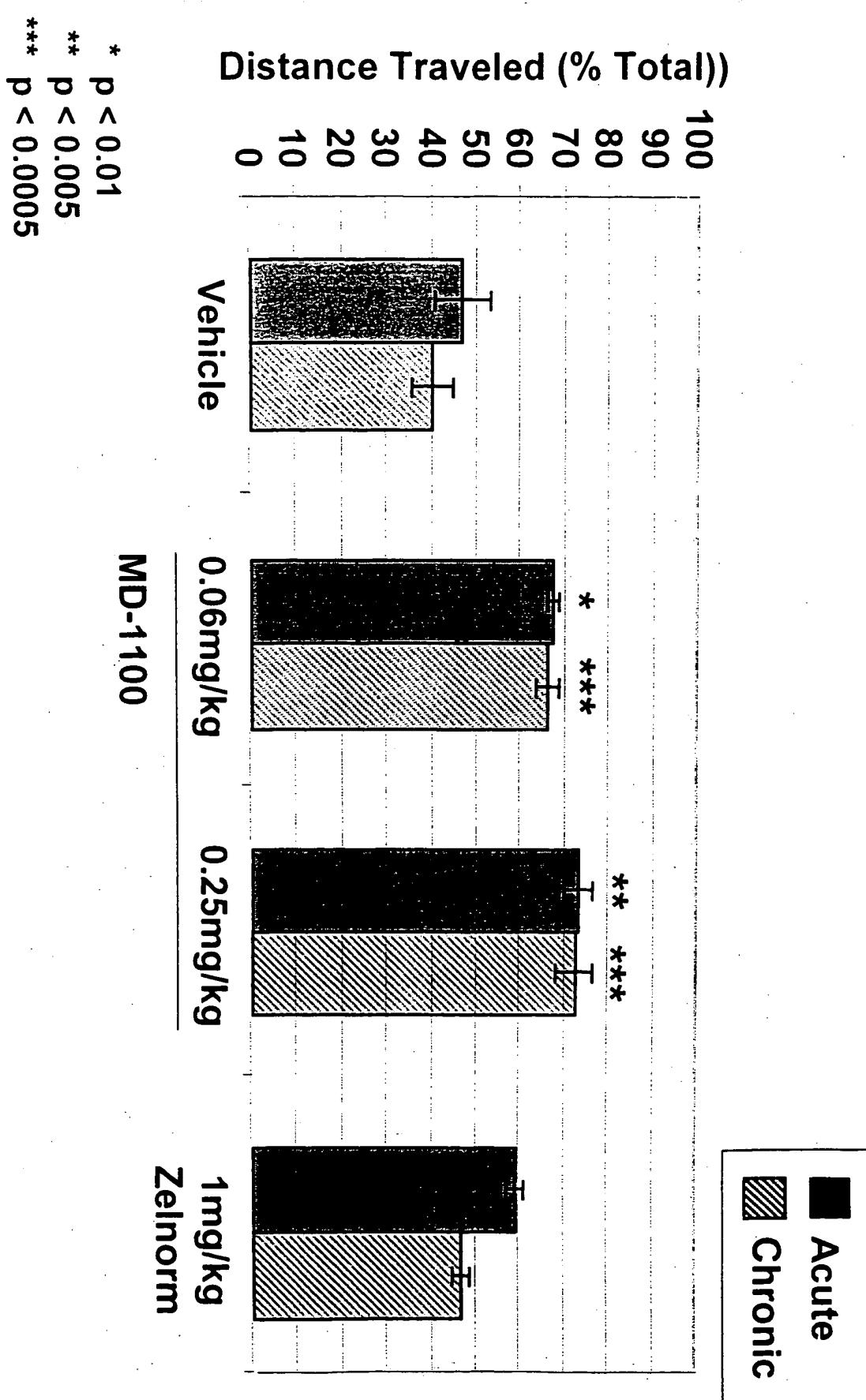
**Figure 4a. Purified MD-915 and MM-416776 in GIT Model**



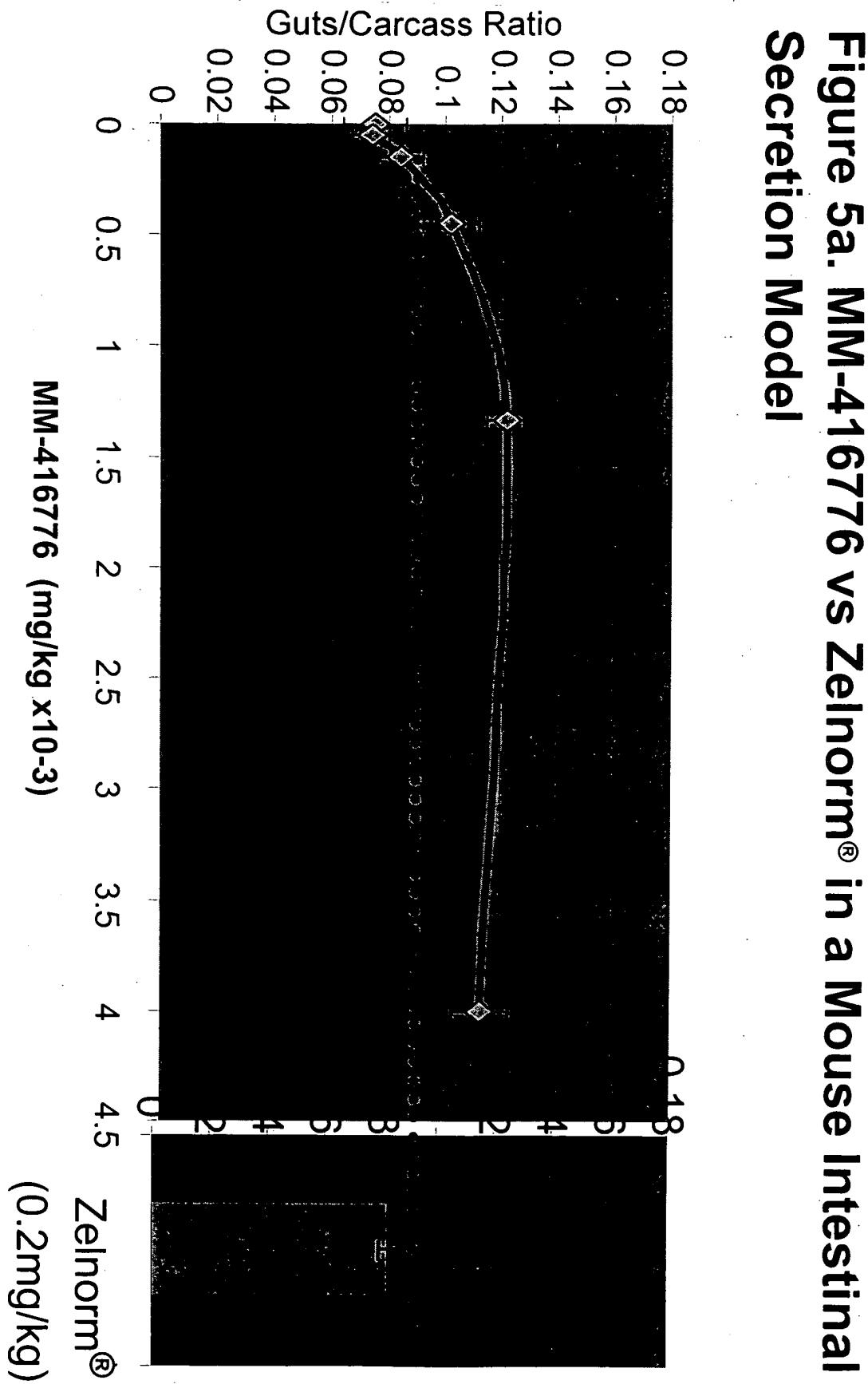
**Figure 4b. Chemically Synthesized Peptides in GIT Model**



# Figure 4c. Chronic vs. Acute Dosing in GIT Assay



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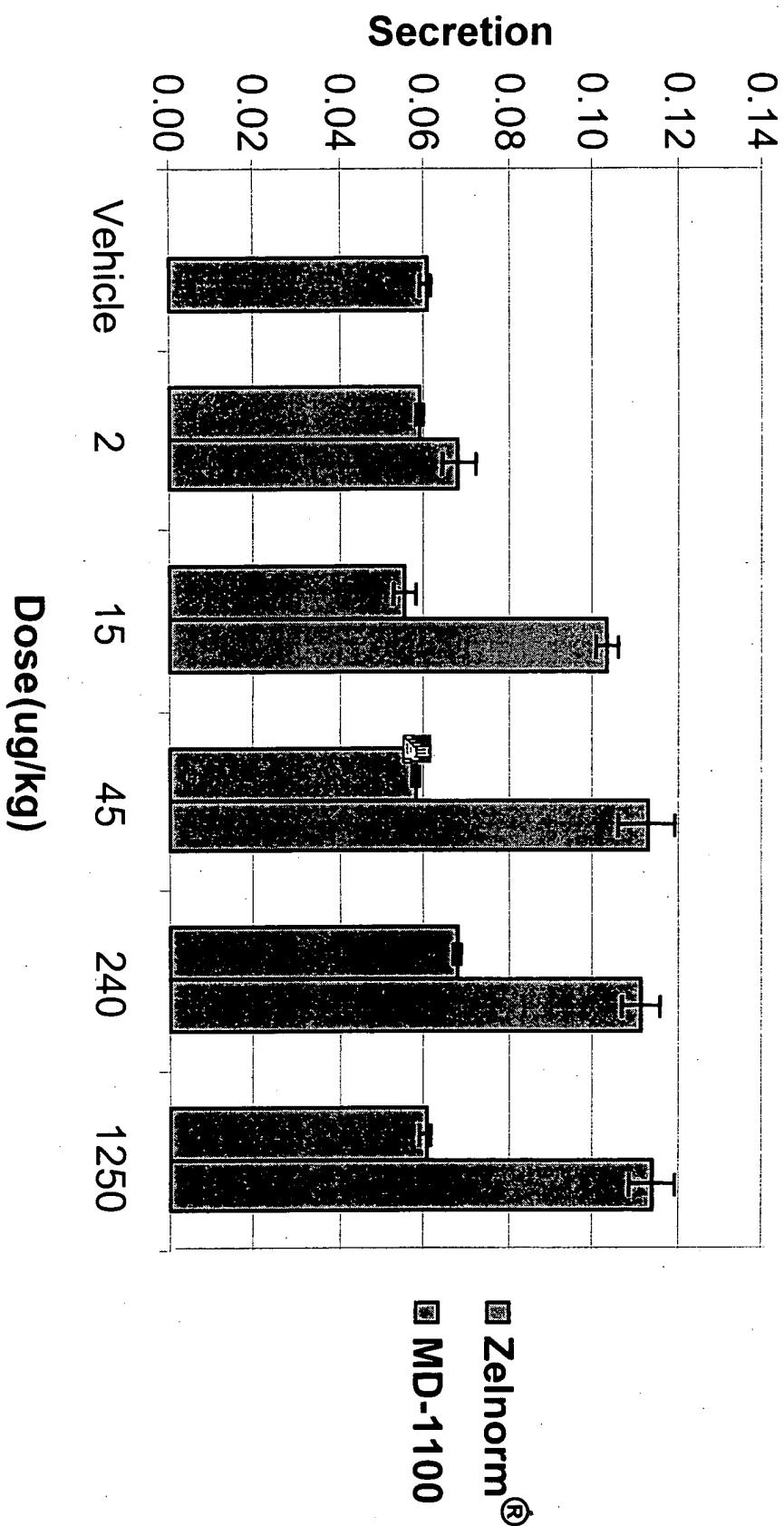


**Figure 5a. MM-416776 vs Zelnorm® in a Mouse Intestinal Secretion Model**

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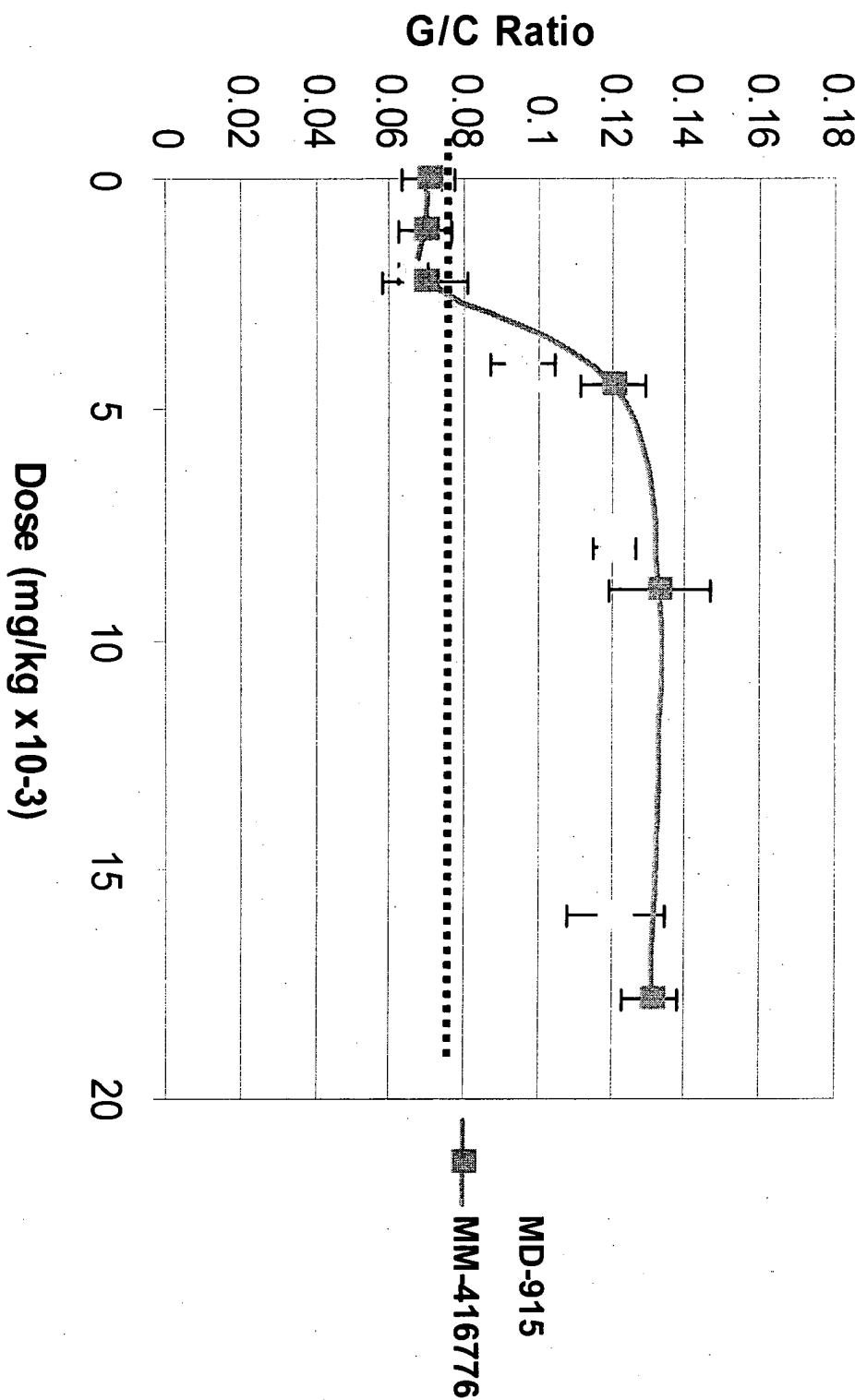
## Figure 5b: MD-1100 vs Zelnorm® in Mouse Intestinal Secretion Model



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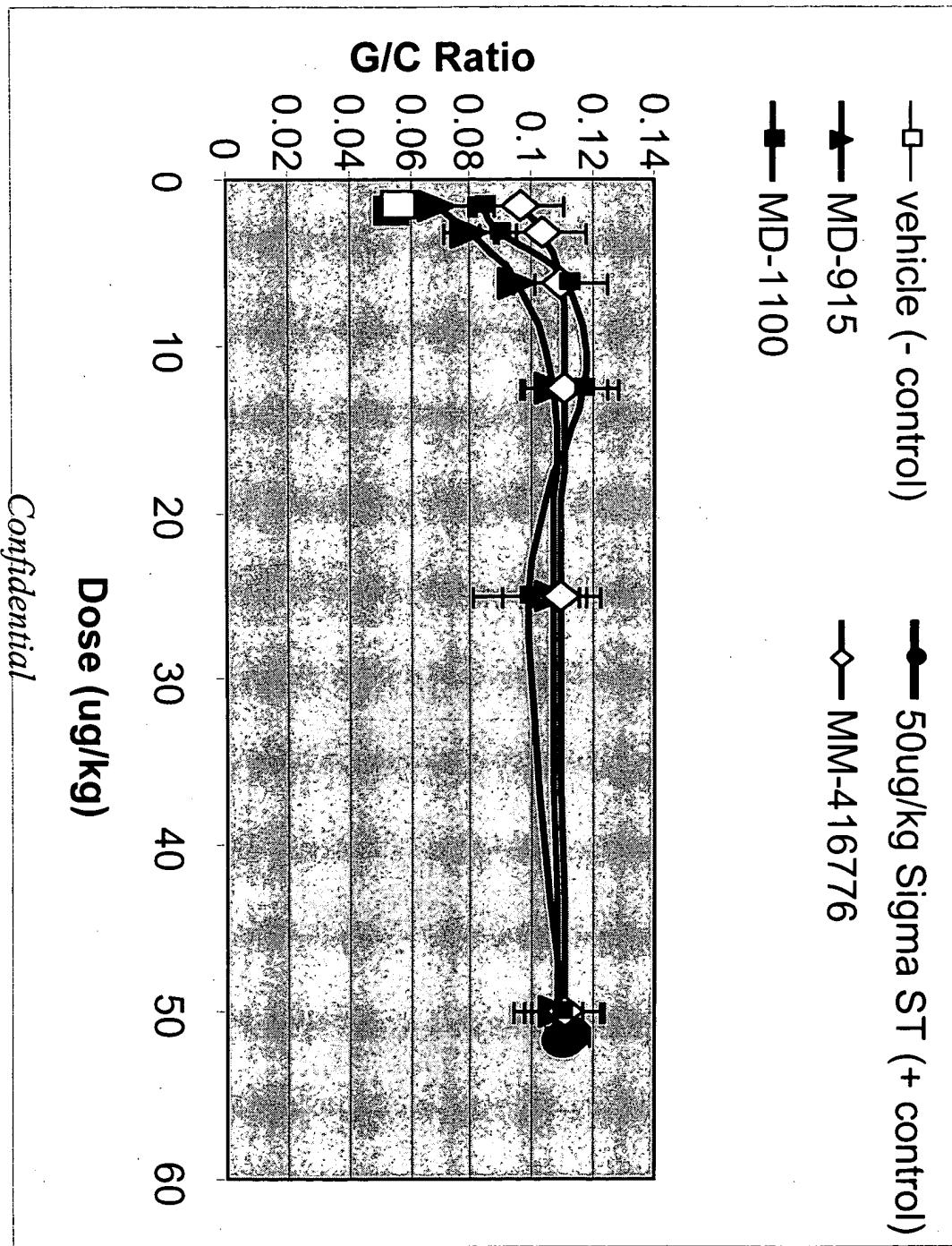
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# Figure 6a. Recombinantly generated MD-915 and MM-416776 in Mouse Intestinal Secretion Model



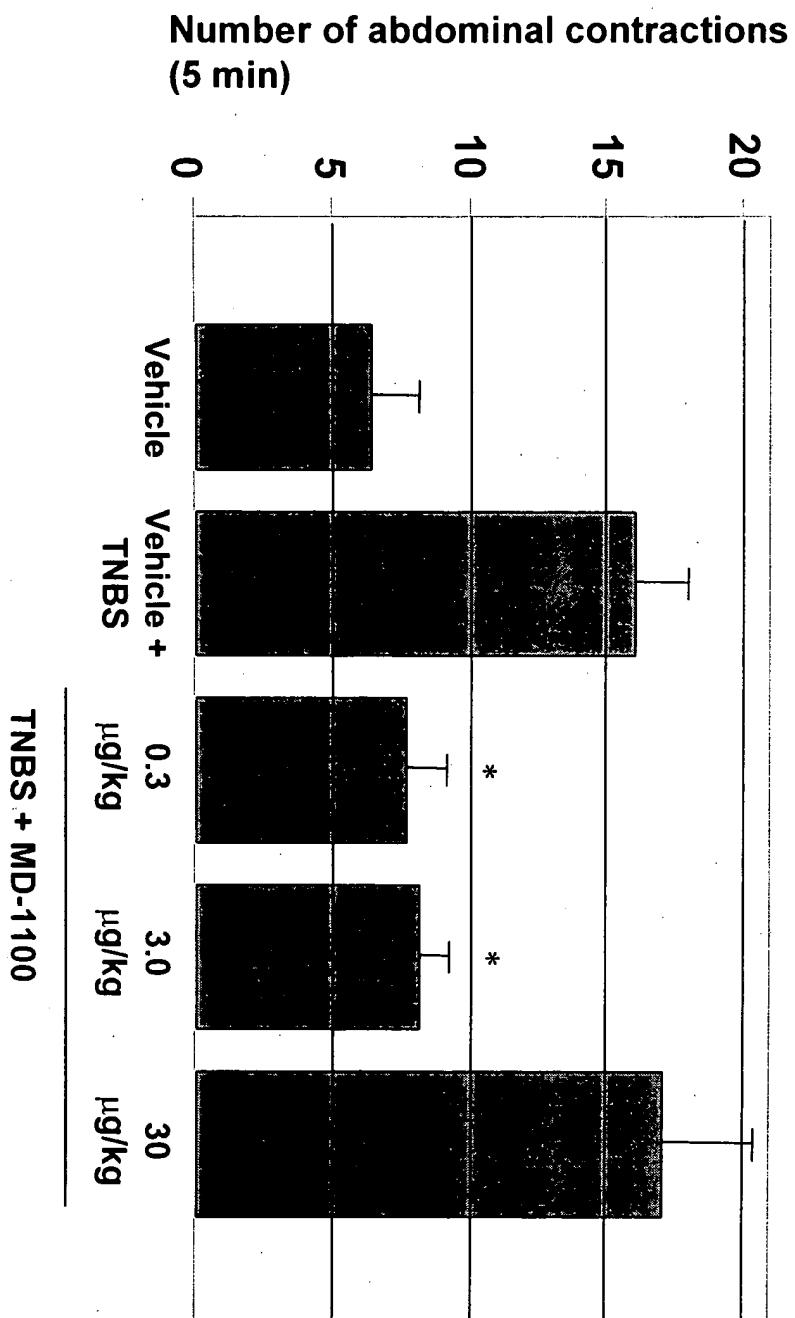
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## Figure 6b. Chemically synthesized peptides in Mouse Intestinal Secretion Model



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# Figure 7: Effect of MD-1100 in a rat TNBS Colorectal Distention Assay

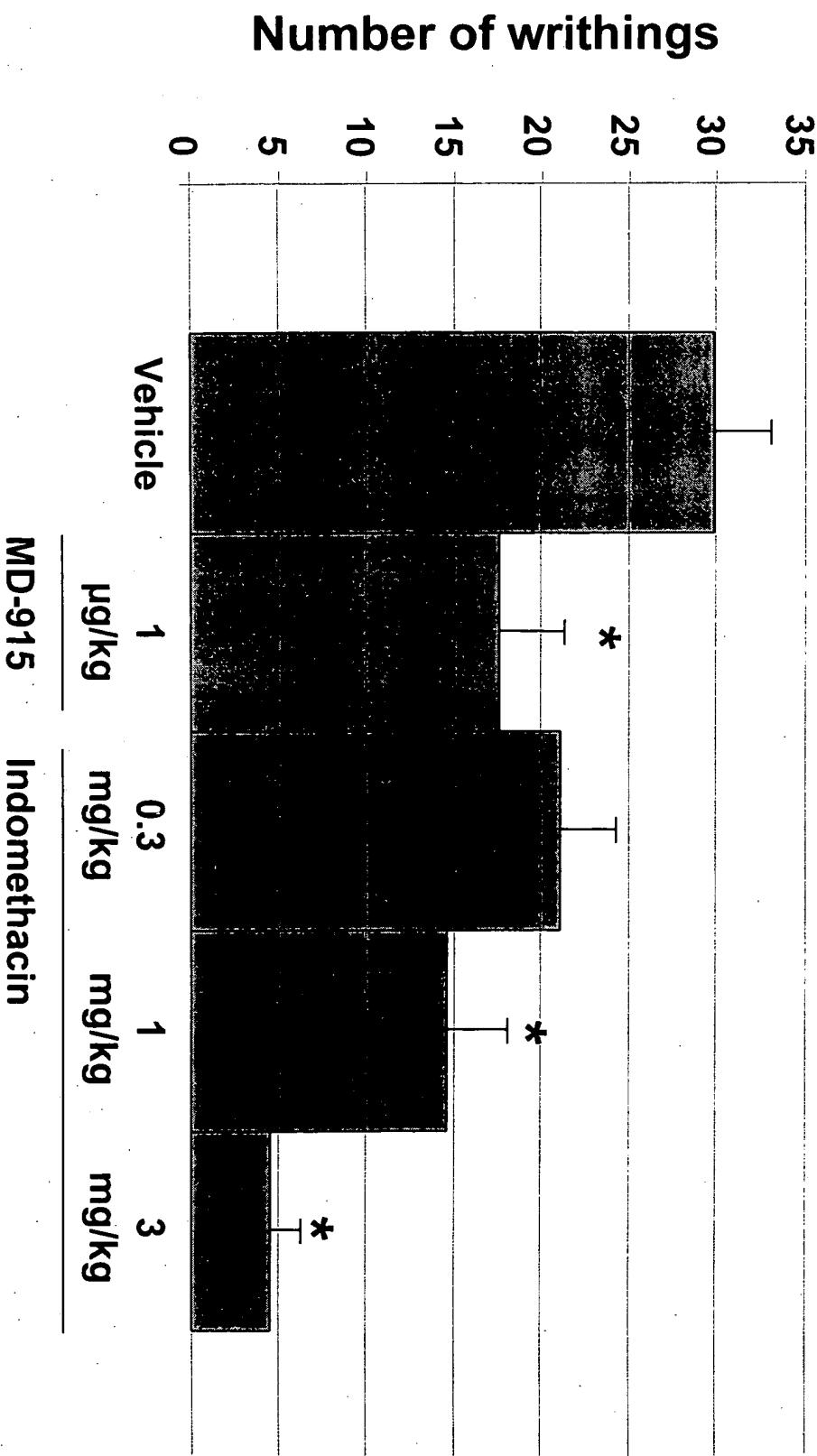


\* p<0.05 as compared to "vehicle" value

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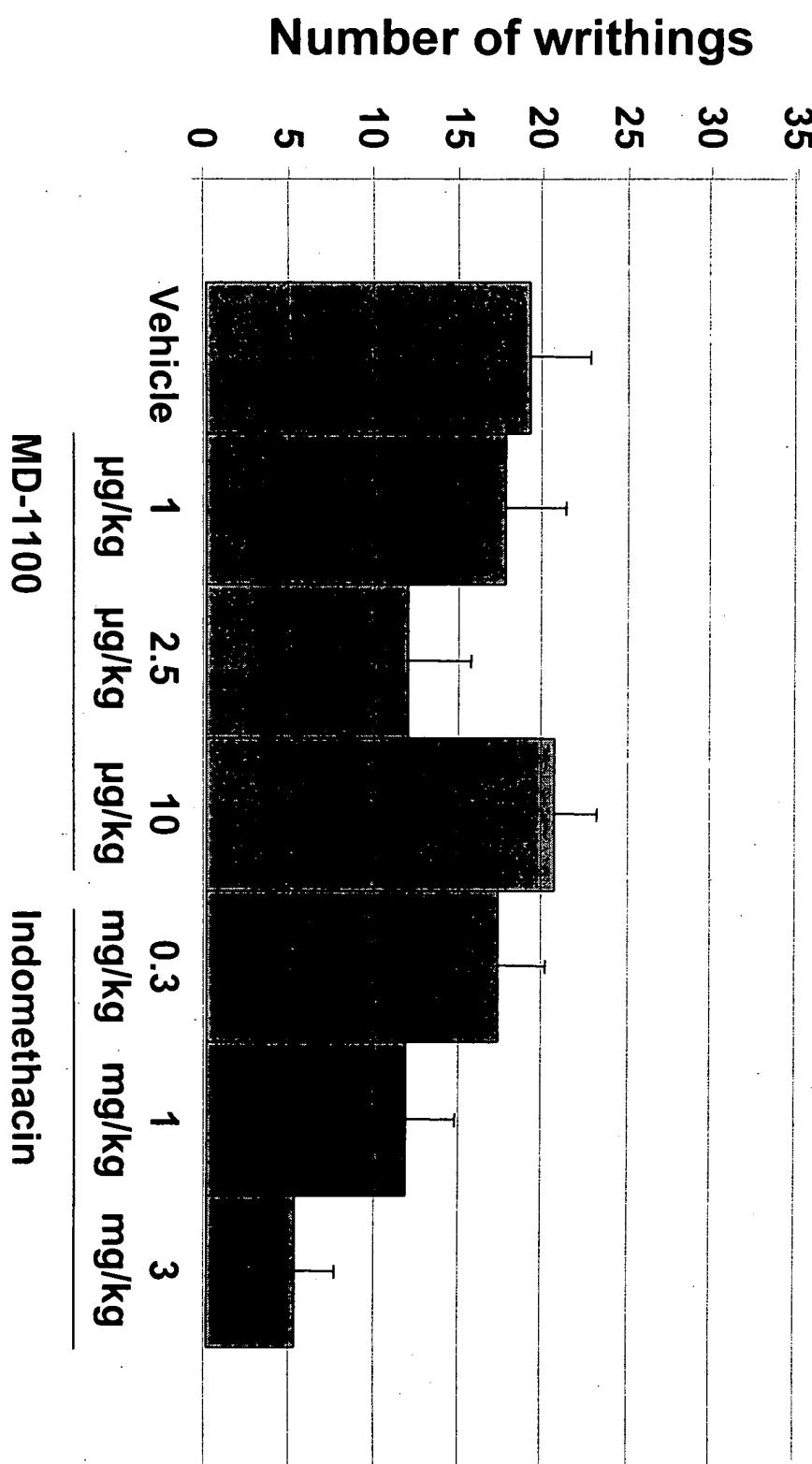
# Figure 8a: Visceral Antinociceptive Effects of MD-915 in a Mouse Writhing Assay



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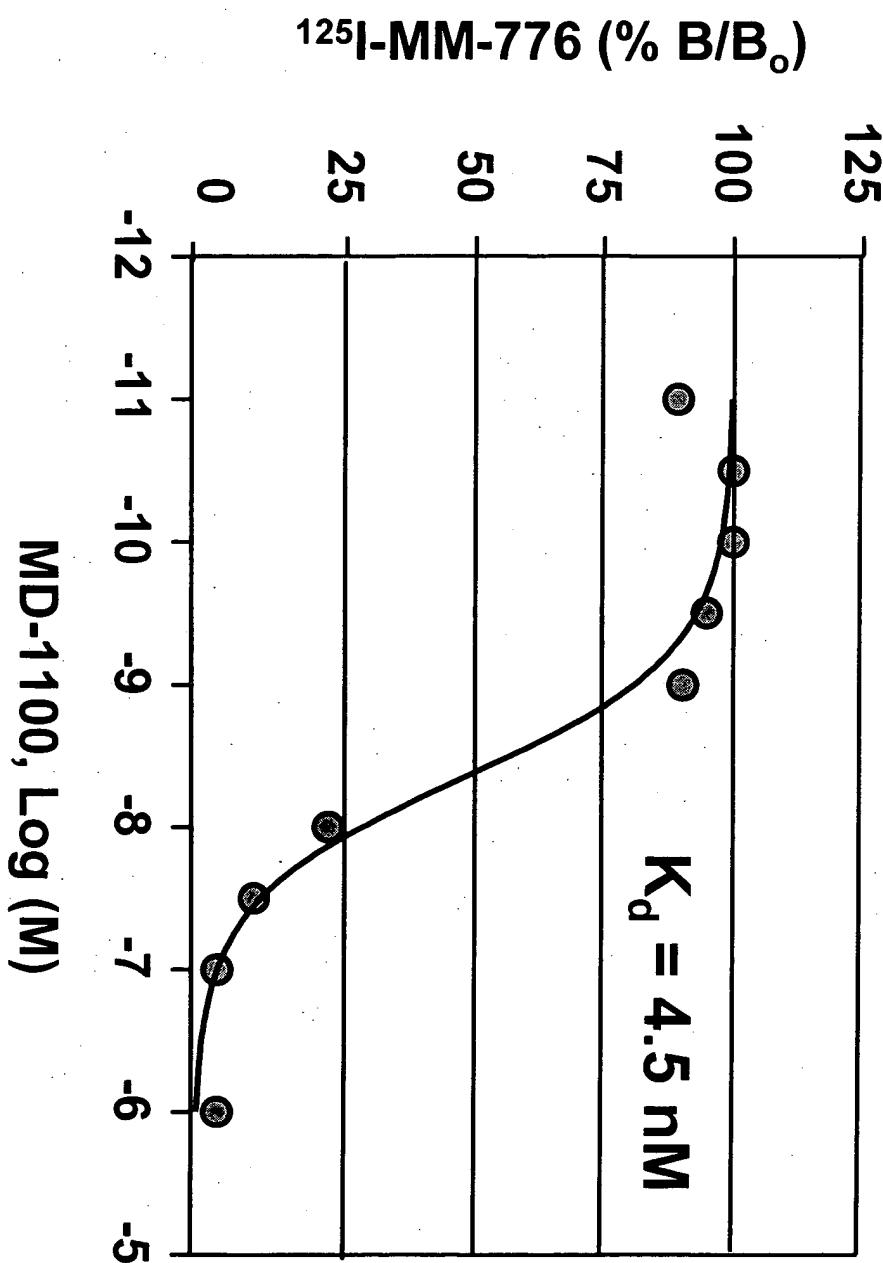
# Figure 8b: Visceral Antinociceptive Effects of MD-1100 in a Mouse Writhing Assay



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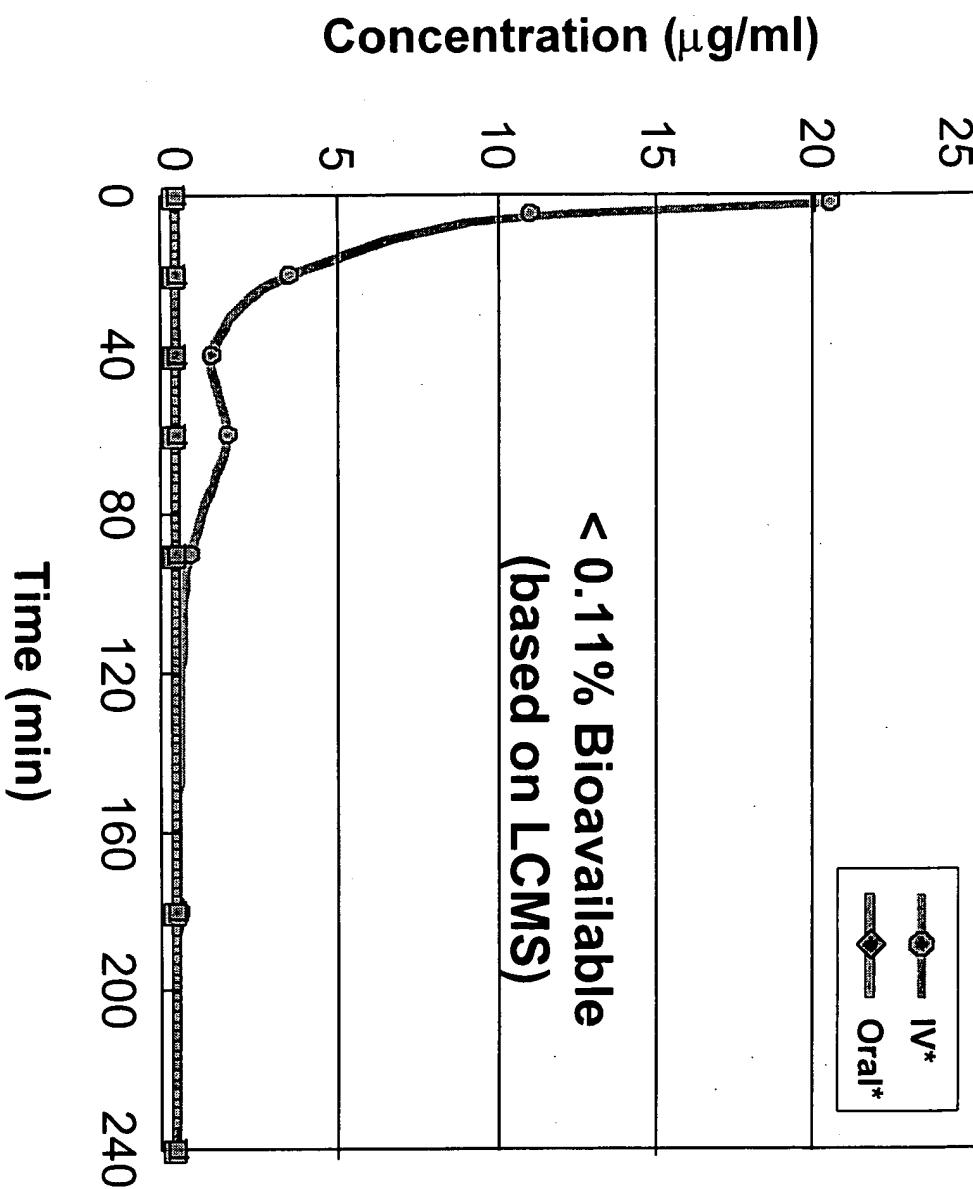
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Figure 9: Competitive Radioligand Binding of MD-1100



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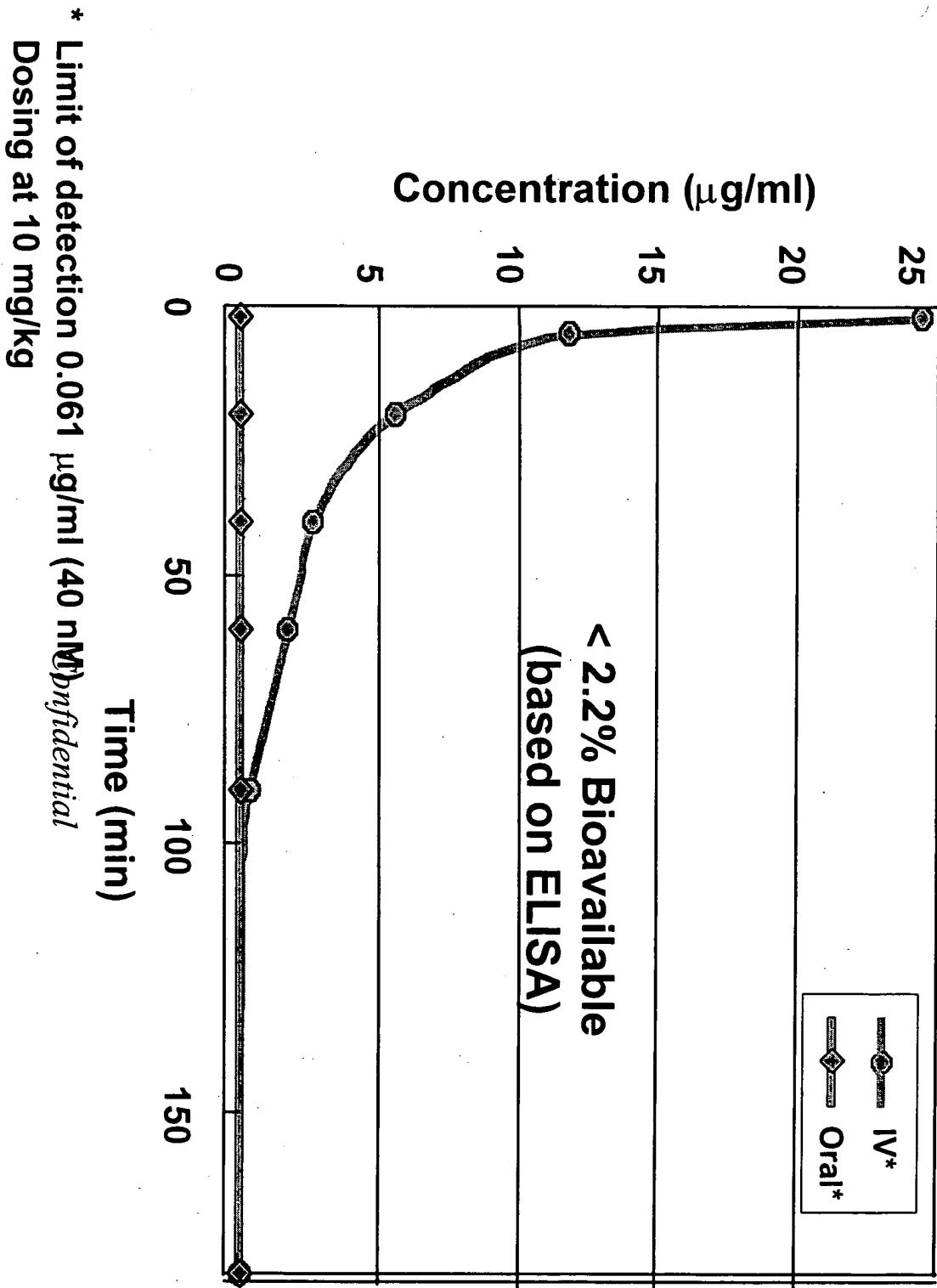
# Figure 10a: Minimum Systemic Absorption of MD-1100 (based on LCMS)



- Limit of detection 0.00063  $\mu\text{g/mL}$  (0.6 nM)
- Dosing at 10 mg/kg

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## Figure 10b: Minimum Systemic Absorption of MD-1100 (based on ELISA)



\* Limit of detection 0.061  $\mu\text{g}/\text{ml}$  (40 nM)  
Dosing at 10 mg/kg